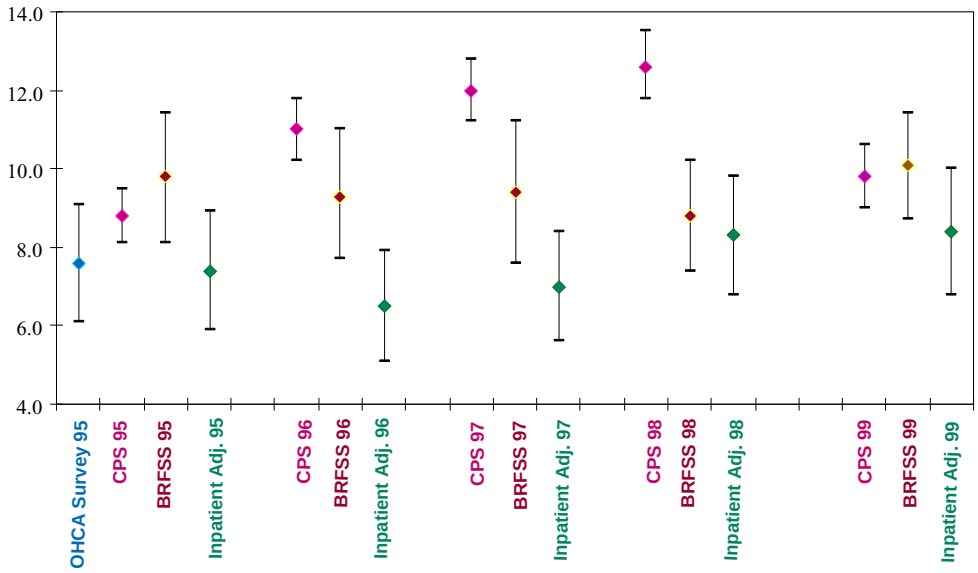
ACHIEVE Issue Brief

April 2001 STATE OF CONNECTICUT ❖ OFFICE OF HEALTH CARE ACCESS

Estimates of Connecticut's Uninsured Using Different Methods

Comparison of Current Population Survey (CPS) and Benchmark Estimates of Connecticut's Uninsured, FY 1995 - FY 1999



The Office of Health Care Access Health (OHCA) has undertaken a mission to ensure that the citizens of Connecticut have access to quality health care. In order to achieve this goal, OHCA monitors and provides information on the rate of uninsured in the state, the variation in the rate over time, the cause of these changes, and the distribution across specific demographic groups to facilitate policy formulation. The purpose of this brief is to examine and describe several different methods of estimating the uninsured. The chart shows sets of estimates of Connecticut's uninsured derived by different sources for fiscal years 1995 through 1999. In the chart, the point estimates are in bold, and the upper and lower limits of the estimates are presented as lines. Interval estimates give a more accurate measure since they provide a range within which the true point lies. The four different methods used to estimate uninsurance rates are described here.

Office of Health Care Access (OHCA) Survey 1995

http://www.state.ct.us/ohca

The OHCA survey, "A Connecticut Family Health Care Access Survey" was fielded in 1995, the year Medicaid Managed Care went into effect but prior to the passage of the State Children's Health Insurance Program (SCHIP) known as the HUSKY Plan (**H**ealthcare for **U**nin**S**ured **K**ids and **Y**outh). OHCA expects to re-administer the survey in 2001 and is cooperating with other states fielding similar surveys to ensure comparability of results.

Current Population Survey (CPS)

http://www.census.gov/

The second set of estimates is from the U.S. Census Bureau's March CPS Annual Demographic Supplement, which includes insurance coverage questions. Individuals who did not report coverage under three major categories - private insurance, Medicaid or other coverage- are considered uninsured. The CPS interprets these uninsured to have lacked coverage for the entire prior year.

Behavioral Risk Factor Surveillance Survey (BRFSS)

http://www.cdc.gov/nccdphp/brfss/

The third set is from the monthly BRFSS conducted by the Centers for Disease Control and Prevention (CDC). BRFSS tracks preventative health practices and health risk behaviors of the adult population in the United States and its territories. It provides state-specific data to state health agencies that play the crucial role of developing measures for reducing these behavioral risks and their consequent illnesses. The CDC adjusts the responses to a question on

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health care coverage according to population demographics and uses this as its estimate of the uninsured.

Inpatient-Adjusted Estimates

Unlike the others, the inpatient-adjusted estimates are not based on survey methods. They were derived using OHCA's hospital discharge database. Newborns, appendectomies, and heart attacks were the conditions used to estimate the number of residents without insurance coverage. These conditions were selected because they require hospitalization regardless of insurance coverage status. The derived percentages were adjusted to reflect age, gender, race and ethnic composition of the state's population.

Observations

Several observations can be made about the different estimates. First, aside from 1995 and 1999 when each of the methods yielded estimates of approximately 10%, the trends from the different approaches displayed varying characteristics. Second, the BRFSS estimates were the most consistent over the years while the CPS estimates experienced the largest changes; the latter showed a 25% increase (the highest) from 8.8% in FY 1995 to 11.0% in 1996, with a peak at 11.8% in 1998. Third, for each year, the inpatient-adjusted methodology estimated the lowest percentages of uninsured in the state while the CPS showed the highest for three years in a row. Remarkably, although the BRFSS and inpatient methods did not always yield similar estimates, the results were lower than the CPS and the two moved in unison, except in 1998 - when there was no statistically significant difference between the two estimates.

		Uninsured	
State's Pop.	Method	Percent	Numbers
3,282,031	CPS	9.0	295,383
	BRFSS	10.1	331,485
	Inpatient-Adjusted	8.4	275,389

Analyses

The reasons for these differences are related to the various methods of estimation. While the CPS used a 90% level of accuracy, the OHCA survey, BRFSS and inpatient-adjusted interval estimates were derived using a 95% level. Due to the lower level of accuracy, the spread for the CPS interval estimates are the smallest. The width of the inpatient-adjusted interval estimates was additionally affected by racial differences in insurance coverage; Whites (3.4%) and Native Americans (4.1%) had relatively lower uninsured rates compared with Blacks (5.9%) and Hispanics (6.6%).

One of the possible causes of the CPS over-estimation of the uninsured is its restricted size; for each year, there were only 630 respondents, so demographic groups were inadequately represented and some were not represented at all. Generally, in estimating population percentages, increasing the samples increases precision, and adjusting for demographic characteristics improves the inferences to be made about the population. BRFSS uses a minimum of 1,829 respondents and the inpatient-adjusted method utilizes an average of 52,800 discharges each year; each of these samples truly reflect the state's demographic composition. Recognizing that having a larger sample will enhance precision, CPS has increased its sample to 1,800 effective December 2000.

Some researchers believe that some CPS respondents may have reported their insurance coverage at time of the interview rather than the prior year, leading to data inconsistencies. In addition, the CPS data has been noted to underreport the number of individuals receiving Medicaid compared with participation data reported to Health and Financing Administration (HCFA) by the states. Majority of the states have a different name for the Medicaid State Children's Health Insurance Program (S-CHIP) program therefore CPS may have wrongly labeled participating residents of such states as uninsured.

Conclusions

Most deliberations concerning the extension of health insurance coverage and measures on the level of success utilize the CPS estimates. The CPS was intended to serve as an estimate of the overall nation's benchmark of various issues, for instance the allocation of funding for the S-CHIP. Uninsured rates vary widely across states and demographic groups, but the CPS does not report insurance status by demographic characteristics. Furthermore, the lower estimates yielded by the other three methods illustrate how the CPS tends to over-estimates the level of uninsured in a state. National estimates of the uninsured available to state policymakers are inadequate for precise statewide or local strategies and this affirms the need for additional reliable sources of data. OHCA is currently considering use of a coordinated state household survey instrument that, if adopted by a number of states, would provide an opportunity for cross state comparisons and greatly enhance our ability to estimate the uninsured in Connecticut.

This information is presented by OHCA to inform policy makers, the public and the health care industry. For further details, please call (860) 418-7028.